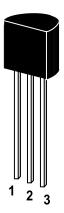
NPN Silicon Epitaxial Planar Transistor

TV PIF amplifier, FM tuner RF amplifier.

The transistor is subdivided into three groups, R, O, and Y, according to its DC current gain

On special request, these transistors can be manufactured in different pin configurations.



1. Emitter 2. Collector 3. Base

TO-92 Plastic Package Weight approx. 0.19g

Absolute Maximum Ratings (T_a = 25°C)

	Symbol	Value	Unit
Collector Base Voltage	V_{CBO}	30	V
Collector Emitter Voltage	V_{CEO}	20	V
Emitter Base Voltage	V_{EBO}	4	V
Collector Current	I _C	20	mA
Power Dissipation	P _{tot}	250	mW
Junction Temperature	T _j	150	°C
Storage Temperature Range	Ts	-55 to +150	°C









Characteristics at T_{amb}=25 °C

	Symbol	Min.	Тур.	Max.	Unit
DC Current Gain					
at V _{CE} =6V, I _C =1mA					
Current Gain Group R	h_{FE}	40	-	80	-
0	h_{FE}	70	-	140	-
Y	h _{FE}	120	-	240	-
Collector Base Breakdown Voltage					
at I _C =10μA	$V_{(BR)CBO}$	30	-	-	V
Collector Emitter Breakdown Voltage					
at I _C =5mA	$V_{(BR)CEO}$	20	-	-	V
Emitter Base Breakdown Voltage					
at I _E =10μA	$V_{(BR)EBO}$	4	-	-	V
Collector Cutoff Current					
at V _{CB} =30V	I _{CBO}	-	-	0.1	μΑ
Emitter Cutoff Current					
at V _{EB} =4V	I _{EBO}	-	-	0.1	μΑ
Collector Saturation Voltage					
at I _C =10mA, I _B =1mA	$V_{CE(sat)}$	-	0.1	0.3	V
Base Emitter On Voltage					
at V_{CE} =6V, I_{C} =1mA	$V_{BE(on)}$	-	0.72	-	V
Gain Bandwidth Product					
at V_{CE} =6V, I_{C} =1mA	f_T	400	600	-	MHz
Output Capacitance					
at V _{CB} =6V, f=1MHz	Сов	-	1.2	-	pF
Common Source Noise Figure					
at V_{CE} =6V, f=100MHz, I_E =1mA, R_S =50 Ω	NF	-	3	5	dB
Power Gain					
at V_{CE} =6V, f=100MHz, I_E =1mA, R_S =50 Ω	G_pe	18	22	-	dB









SEMTECH ELECTRONICS LTD.